Appln. No. 10/736,309

Response dated Feburary 5, 2007

Reply to Office Action of November 3, 2006

Docket No. BOC9-2000-0016 (429)

## **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the instant application:

## **Listing of Claims:**

- 1. (Currently Amended) A gateway serving as an interface between a mobile network and a wireless network, wherein the gateway is configured to appear as an additional mobile data base station of the mobile network to a mobile switching center of the mobile network, and wherein said gateway is configured to send a heightened signal strength indicator to the mobile switching center network for prompting the mobile switching center network to recognize the gateway as a preferred path for handing off a call from a mobile data base station of the mobile network currently handling the call.
- 2. (Original) The gateway of claim 1, wherein the signal strength indicator is fabricated.
- 3. (Original) The gateway of claim 1, wherein the wireless network is configured according to one of the 802.11 wireless communications protocols.
- 4. (Currently Amended) The gateway of claim 1, wherein the gateway routes the call from the mobile network switching center to a wireless access point of the wireless network via a packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.
- 5. (Currently Amended) The gateway of claim 1, further comprising:
- a mobile network interface comprising a transport interface configured to exchange mobile control channel signaling data with the mobile <u>switching center</u> network

and a voice channel interface configured to exchange audio data with the mobile switching center network;

a mobile control and messaging component configured to communicate with the mobile switching center network via said transport interface;

a call control component configured to format the mobile control channel signaling data from the mobile <u>switching center network</u> for use over the packet-switched network;

a voice media conversion component configured to format voice data for sending using a real-time streaming protocol over the packet-switched network; and

an interface to exchange call control data and voice data with the packet-switched network.

- 6. (Original) The gateway of claim 5, wherein the interface to the packet-switched network is a Session Initiation Protocol interface.
- 7. (Currently Amended) Within a gateway interface, a method of call control between a mobile network and a wireless network comprising:

establishing, with a mobile <u>switching center network</u> of said mobile network, a control messaging link for exchanging mobile control channel signaling data, and a voice channel link for exchanging audio data for a mobile call, <u>wherein said gateway appears as an additional mobile data base station of the mobile network to the mobile switching network;</u>

sending a heightened signal strength indicator to the mobile <u>data base station</u> <u>currently handling the mobile call network</u> for prompting the mobile <u>switching center</u> network to recognize the gateway as a preferred path for handing off the mobile call;

establishing a communications link with a packet-switched network; and

Appln. No. 10/736,309

Response dated Feburary 5, 2007

Reply to Office Action of November 3, 2006

Docket No. BOC9-2000-0016 (429)

routing the mobile call from <u>said mobile data base station</u> the mobile network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

- 8. (Original) The method of claim 7, wherein the signal strength indicator is fabricated.
- 9. (Original) The method of claim 7, said routing step comprising routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.
- 10. (Original) The method of claim 7, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.
- 11. (Currently Amended) A system for call control between a mobile network and a wireless network comprising:

means for establishing, with a mobile <u>switching center</u> <u>network</u> <u>of said mobile</u> <u>network</u>, a control messaging link for exchanging control signal channel signaling data and a voice channel link for exchanging audio data for a mobile call, <u>wherein said</u> <u>gateway appears as an additional mobile data base station of the mobile network to the mobile switching network;</u>

means for sending a heightened signal strength indicator to the mobile <u>data base</u> station currently handling the mobile <u>call</u> network for prompting the mobile <u>switching</u> <u>center</u> network to recognize the system as a preferred path for handing off the mobile call;

means for establishing a communications link with a packet-switched network; and

Appln. No. 10/736,309

Response dated Feburary 5, 2007

Reply to Office Action of November 3, 2006

Docket No. BOC9-2000-0016 (429)

means for routing the mobile call from <u>said mobile data base station</u> the <u>mobile</u> network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

- 12. (Original) The system of claim 11, wherein the signal strength indicator is fabricated.
- 13. (Original) The system of claim 11, said means for routing further comprising means for routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.
- 14. (Original) The system of claim 11, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.
- 15. (Currently Amended) A computer-readable medium, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

establishing, with a mobile network switching center network of said mobile network, a control messaging link for exchanging mobile control channel signaling data and a voice channel link for exchanging audio data for a mobile call, wherein said gateway appears as an additional mobile data base station of the mobile network to the mobile switching network;

sending a heightened signal strength indicator to the mobile <u>data base station</u> <u>currently handling the mobile call</u> <u>network</u> for prompting the mobile <u>switching center</u> <u>network</u> to recognize the gateway as a preferred path for handing off the mobile call;

establishing a communications link with a packet-switched network; and

Appln. No. 10/736,309 Response dated Feburary 5, 2007 Reply to Office Action of November 3, 2006 Docket No. BOC9-2000-0016 (429)

routing the mobile call from <u>said mobile data base station</u> the mobile network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

- 16. (Previously Presented) The computer-readable medium of claim 15, wherein said signal strength indicator is fabricated.
- 17. (Previously Presented) The computer-readable medium of claim 15, said routing step comprising routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.
- 18. (Previously Presented) The computer-readable medium of claim 15, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.
- 19. (Currently Amended) A method for mobile device handoff between a mobile network and a wireless network comprising:

on a mobile device, detecting a wireless access point <u>of the wireless network;</u> on said mobile device, lowering a transmission power to <u>a mobile data base station</u> <u>of said mobile network currently handling communications with said mobile device;</u>

on said mobile network, <u>a mobile switching center</u> detecting a lower power signal from said mobile device and identifying systems <u>at least one mobile data base station of the mobile network</u> available to handle communication with said mobile device, <u>wherein a gateway serving as an interface between the mobile network and the wireless network is configured to appear as an additional data base station of the mobile network; and</u>

on a gateway associated with said <u>wireless network</u> mobile device, indicating to said mobile <u>switching center network</u> that a heightened signal strength has been received from the mobile communication device for prompting the mobile <u>switching center</u>

Appln. No. 10/736,309 Response dated Feburary 5, 2007 Reply to Office Action of November 3, 2006 Docket No. BOC9-2000-0016 (429)

network to handoff <u>communications</u> with <u>said mobile device</u> to said gateway for providing connectivity between <u>said mobile switching center</u> said mobile device [[and]] <u>through</u> said wireless access point, wherein said heightened signal strength is not indicative of actual signal strength of said mobile device.

20. (Previously Presented) The method of claim 19, further comprising on said mobile device, sending an invite through a wireless network to a SIP server;

on said gateway, forwarding said invite to said SIP server via Internet; and authenticating a SIP user agent on said mobile device.

21. (Currently Amended) The method of claim 20, further comprising:
upon authenticating said SIP user agent, setting up an internet protocol (IP)
streaming session between said gateway and mobile device;

switching over from said mobile <u>data base station currently handling</u> <u>communications with said mobile device network</u> to said gateway; and

tearing down a call <u>communications</u> between said mobile network and said mobile device, for handing off said mobile device from a mobile network to a wireless network.